U.S. EPA Conference Call with the Washington Alliance for Non-toxic Play and Athletic Fields and Healthy Soccer San Francisco

June 27, 2016 – 10:30am – 11:30am Pacific Time (1:30pm-2:30pm Eastern Time)

Meeting Summary

Purpose

The purpose of this conference call is for EPA to share information relevant to the *Federal Research Action Plan on the Use of Recycled Tire Crumb on Playing Fields and Playgrounds* and to hear information from the Washington Alliance for Non-toxic Play and Athletic Fields (WANPAF) and Healthy Soccer San Francisco (HSSF) related to crumb rubber manufacturing, use, and installation on synthetic turf fields. For more information on the Action Plan, see: www.epa.gov/tirecrumb

Attendees

Christi Davis, Washington Alliance for Nontoxic Play and Athletic Fields Kathleen McCowin, Healthy Soccer San Francisco Jacqueline McQueen, EPA Office of Research and Development Monica Linnenbrink, EPA Office of Research and Development Charlotte Mooney, EPA Office of Land and Emergency Management Nicole Villamizar, EPA Office of Land and Emergency Management Ksenija Janjic, EPA Office of Land and Emergency Management Chris Carusiello, EPA Office of Land and Emergency Management

Action Items

WANPAF and HSSF to send to EPA:

- The contact information for the individual responsible for reporting on Chinese tires (the individual responsible for quality testing for fields in San Francisco);
- Contact information for the Safe and Healthy Playing Fields Coalition;
- Any suggested questions to ask of the industry;
- Names of additional groups EPA may wish to contact; and
- Names of disinfectants known to be used on synthetic turf fields.

Meeting Summary

Welcome & Introductions

- The call will be recorded.
- These meeting notes may be subject to release under the Freedom of Information Act.

Overview of EPA's Office of Land and Emergency Management (OLEM)'s role in implementing the Federal Research Action Plan

- OLEM's role in implementing the federal research action plan is to conduct outreach to better
 understand how tires are produced, how tire crumb is made, and how fields are constructed and
 maintained.
- The question of variability in the tire crumb product is very important to the study researchers.

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Summary of remarks made by the WAANPF and HSSF:

- Some of the information EPA is looking for must be obtained by industry contacts.
- Tire crumb varies in different compounds, metals, etc. These compounds will vary field to field and from sample to sample. ¹
- As heat increases, VOCs are released exponentially. Heat is a massive factor in exposure.²
- Some small children have a much longer exposure (24-48 hours) to the crumb because of a lack of sanitation and hygiene practices (the crumb sticks to skin and does not get washed off). They also crawl and roll around in the rubber.
- Even non-soccer goalies blow their noses and black crumbs come out.
- Sometimes chemicals are added to the fields, but only if they are maintained.
 - 95% of fields are not maintained routinely (including GMAX maintenance, at least 25% not being in GMAX compliance).
- The study that needs to happen is an outbreak investigation (i.e. do we have an outbreak of cancer in athletes playing on synthetic turf?).
 - o Could potentially cross-reference NCAA lists with cancer registries.
- WAANPF and HSSF are in possession of a list of football players with cancer (national list). Over 200 players, over half of which played on artificial turf.
 - Over 112 who have played on artificial turf are under 30. A lot of testicular, lymphoma, brain cancers. Only 2 thyroid cancers. The distribution of cancers seem to be wrong.
 - o There is also an unusual number of lineman on the list.
- The Washington State study is only looking at the athletes on Amy Griffin's list.
- The EPA study should incorporate a breathing space monitor or mobile air monitor to test the air around fields.
- Public health scientists and epidemiologists should be included in EPA's study.
- In Washington State, maintenance comes out of the general operating budget, while construction comes out of the capital budget. In Washington State, there is no opportunity to raise money for the general budget, but there is an opportunity to raise money in the capital funds levy.
- There is one disinfectant that uses an enzymatic disinfectant; another one uses carcinogenic chemicals.
- Fire retardants are used on some fields.
 - o It has been mentioned that the retardant is put on the crumb rubber.
- Carbon black comprises 30-50% of the crumb rubber material.
- When testing material on the field, make sure to test the top layer (larger particles) as well as the bottom layer, where fine particles may have settled.
- Imports from Chinese tires have more levels of constituents and more variability.

¹ Bioaccessibility and Risk of Exposure to Metals and SVOCs in Artificial Turf Field Fill Materials and Fibers. Pavilonis B.T., Weisel C.P., Buckley B., Lioy P.J.

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² Mutagenic Potential of Artificial Athletic Field Crumb Rubber at Increased Temperatures. Michael J. Dorsey, Elizabeth Anderson, Oliva Ardo, Max Chou, Edward Farrow, Ethan L. Glassman, Margaret Manley, Herbert Meisner, Cecily Meyers, Nolan Morley, Joseph Rominger, Madison Sena, Madison. R. Stiefbold, Benjamin Stites, Maxwell Tash, Emma Weber, Patrick E. Counts